

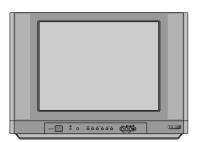
# COLOR TV SERVICE MANUAL

CHASSIS: MC-049B

MODEL:RZ-21FB55MX/RX

# **CAUTION**

BEFORE SERVICING THE CHASSIS, READ THE SAFETY PRECAUTIONS IN THIS MANUAL.



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# **SAFETY PRECAUTIONS**

# **IMPORTANT SAFETY NOTICE**

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These parts are identified by  $\Delta$  in the Schematic Diagram and Replacement Parts List.

It is essential that these special safety parts should be replaced with the same components as recommended in this manual to prevent X-RADIATION, Shock, Fire, or other Hazards.

Do not modify the original design without permission of manufacturer.

# **General Guidance**

An **isolation Transformer should always be used** during the servicing of a receiver whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personal injury from electrical shocks.

It will also protect the receiver and it's components from being damaged by accidental shorts of the circuitry that may be inadvertently introduced during the service operation.

If any fuse (or Fusible Resistor) in this TV receiver is blown, replace it with the specified.

When replacing a high wattage resistor (Oxide Metal Film Resistor, over 1W), keep the resistor 10mm away from PCB.

Keep wires away from high voltage or high temperature parts.

Due to high vacuum and large surface area of picture tube, extreme care should be used in **handling the Picture Tube**. Do not lift the Picture tube by it's Neck.

# X-RAY Radiation

# Warning:

The source of X-RAY RADIATION in this TV receiver is the High Voltage Section and the Picture Tube.

For continued X-RAY RADIATION protection, the replacement tube must be the same type tube as specified in the Replacement Parts List.

To determine the presence of high voltage, use an accurate high impedance HV meter.

Adjust brightness, color, contrast controls to minimum. Measure the high voltage.

The meter reading should indicate

23.5; 1.5KV: 14-19 inch, 26; 1.5KV: 19-21 inch, 29.0; 1.5KV: 25-29 inch, 30.0; 1.5KV: 32 inch

If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.

# Before returning the receiver to the customer,

always perform an **AC leakage current check** on the exposed metallic parts of the cabinet, such as antennas, terminals, etc., to be sure the set is safe to operate without damage of electrical shock.

# Leakage Current Cold Check(Antenna Cold Check)

With the instrument AC plug removed from AC source, connect an electrical jumper across the two AC plug prongs. Place the AC switch in the on position, connect one lead of ohm-meter to the AC plug prongs tied together and touch other ohm-meter lead in turn to each exposed metallic parts such as antenna terminals, phone jacks, etc.

If the exposed metallic part has a return path to the chassis, the measured resistance should be between 1M $\Omega$  and 5.2M $\Omega$ .

When the exposed metal has no return path to the chassis the reading must be infinite.

An other abnormality exists that must be corrected before the receiver is returned to the customer.

### Leakage Current Hot Check (See below Figure)

Plug the AC cord directly into the AC outlet.

# Do not use a line Isolation Transformer during this check.

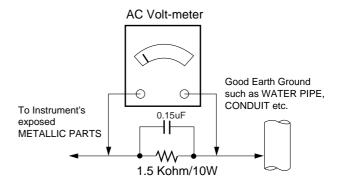
Connect 1.5K/10watt resistor in parallel with a 0.15uF capacitor between a known good earth ground (Water Pipe, Conduit, etc.) and the exposed metallic parts.

Measure the AC voltage across the resistor using AC voltmeter with 1000 ohms/volt or more sensitivity.

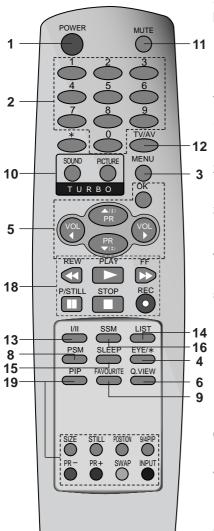
Reverse plug the AC cord into the AC outlet and repeat AC voltage measurements for each exposed metallic part. Any voltage measured must not exceed 0.75 volt RMS which is corresponds to 0.5mA.

In case any measurement is out of the limits specified, there is possibility of shock hazard and the set must be checked and repaired before it is returned to the customer.

# Leakage Current Hot Check circuit



# **DESCRIPTION OF CONTROLS**



All the functions can be controlled with the remote control handset. Some functions can also be adjusted with the buttons on the front panel of the set.

### Remote control handset

Before you use the remote control handset, please install the batteries. See the next page.

### 1. POWER

switches the set on from standby or off to standby.

# 2. NUMBER BUTTONS

switches the set on from standby or directly select a number.

### 3. MENU

selects a menu.

# 4. EYE/\* (option)

switches the eye function on or off.

# 5. ▲ / ▼ (Programme Up/Down)

selects a programme or a menu item. switches the set on from standby. scans programmes automatically.

# √ / ► (Volume Up/Down)

adjusts the volume.

adjusts menu settings.

# OK

accepts your selection or displays the current mode.

# 6. Q.VIEW

returns to the previously viewed programme.

# 7. TELETEXT BUTTONS (option)

These buttons are used for teletext. For further details, see the 'Teletext' section.

# 8. PSM (Picture Status Memory)

recalls your preferred picture setting.

# 9. FAVOURITE

selects a favorite programme.

# 10. TURBO PICTURE / SOUND BUTTON (option)

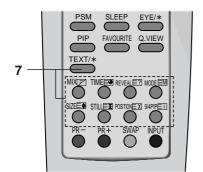
selects Turbo picture and sound.

# **11. MUTE**

switches the sound on or off.

# 12. TV/AV

selects TV or AV mode. switches the set on from standby.



(Without TELETEXT / With PIP)

(With TELETEXT / PIP)

# 13. I/II/\* (option)

selects the language during dual language broadcast. (option) selects the sound output.

# 14. LIST

displays the programme table.

# 15. SLEEP

sets the sleep timer.

# 16. SSM/\* (option) (Sound Status Memory)

recalls your preferred sound setting.

# 17. SURROUND (**◄**○>/**\***) (option)

selects surround sound.

### 18. VCR BUTTONS

control a LG video cassette recorder.

# 19. PIP BUTTONS (option)

PIP

switches the sub picture on or off.

PR +/-

selects a programme for the sub picture.

**SWAP** 

alternates between main and sub picture.

**INPUT** 

selects the input mode for the sub picture.

**SIZE** adjusts the sub picture size.

STILL

freezes motion of the sub picture.

# **POSITION**

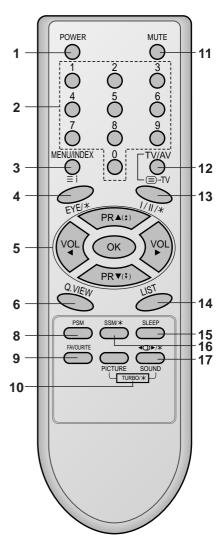
relocates the sub picture in clockwise direction.

9/4 PIP

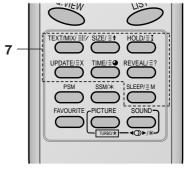
switches on or off the 9 or 4 sub pictures.

# \* : No function

**COLOURED BUTTONS:** These buttons are used for teletext (only TELETEXT models) or programme edit.



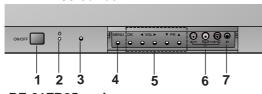
(Without TELETEXT / PIP)



(With TELETEXT / Without PIP)

# Front panel

# **RZ-21FA35** series



# **RZ-21FB25** series



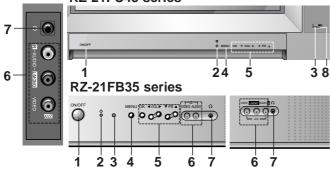
ϙ δ ό ο ό ό ό i

2 3 RZ-17/21FB75 series

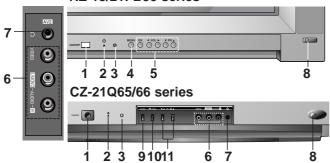


6 7

**RZ-21FC45** series



RZ-15/21FB95 series



# MAIN POWER (ON/OFF)

switches the set on or off.

# **POWER/STANDBY INDICATOR**

illuminates brightly when the set is in standby mode.

dims when the set is switched on.

### REMOTE CONTROL SENSOR

### 4. MENU

selects a menu.

8

accepts your selection or displays the current mode.

# √ / ► (Volume Up/Down)

adjusts the volume. adjusts menu settings.

**▲** / ▼ (Programme Up/Down)

selects a programme or a menu item. switches the set on from standby.

# **AUDIO/VIDEO IN SOCKETS (AV2)** (option)

Connect the audio/video out sockets of external equipment to these sockets.

# 7. HEADPHONE SOCKET (option)

Connect the headphone plug to this socket.

# 8. EYE (option)

adjusts picture according to the surrounding conditions.

# TV/AV (option)

selects TV or AV mode. clears the menu from the screen. switches the set on from standby.

# 10. ○ (Function) (option)

selects volume, EYE (option), picture items or brief auto programme while the menus not display.

# 11. + / - (▲ / ▼) (option)

adjusts the function or selects a programme.

switches the set on from standby.

# 12. TURBO SOUND / PICTURE (option)

switches Turbo sound or Turbo picture function on or off.

# Note:

- Do not place any heavy objects (over 4Kg) on the RZ-21FA35 series models.
- Shown is a simplified representation of front or side panel. Here shown may be somewhat different from your set.

# **SPECIFICATIONS**

**Note:** Specification and others are subject to change without notice for improvement.

# Scope

This specification can be applied to all the television related to MC-049B Chassis.

# ■ Test and Inspection Method

1) Capacity: Follow LG electronics TV testing Standard.

2) Another Required Standard

- EMI : Following CE Standard (EN55020, EN55013)

- Safety : Following CB Standard (EN55013)

# ■ Requirement for Test

Testing for standard of each par must be followed in below condition

1) Temperature :  $20 \pm 5$ °C

(CST must be tested 40 ± 5°C . Humidity : 50%)

2) Relative Humidity: 65 ± 10%

3) Power: Standard input Voltage (110~240V, 50/60Hz)

4) Measurement must be performed after heat-run more than 20min.

Adjusting Standard for this chassis is followed a special standard.

# ■ General Specification

No	Item	Specification	Remark
1	Receiving System	1) PAL/SECAM BG	For EU/ For Non EU
		2) PAL/SECAM DK	
		3) PAL I/I	
		4) NTSC M	
		5) SECAM-L/L'	
		6) NTSC 4.43(AV)	
2	Receiving Channel	1) VHF : E2 ~ E12	For EU/ For Non EU
		UHF : E21 ~ E69	
		CATV : S1 ~ S20	
		HYPER : S21 ~ S41	
		2) L/L' : B,C,D	
		3) VHF : 02 ~ 13	NTSC-M (Multi - model)
		UHF : 14~ 69	
		CATV : 02 ~ 71	
3	Input Voltage	110-240V~, 50/60Hz	Non EU
		240V~, 50Hz	EU
4	Market	EU,CIS, China, Asia, Africa	
5	Screen Size	14" ~ 21"	FLAT / CONVENTIONAL
6	Tuning System	FVS 100Program	
7	Operating Environment	1) Temp. : 0 ~ 45 deg	200 PR. (OPTION)
		2) Humidity: 85% under	
8	Storage Environment	1) Temp. : -20 ~ 60 deg	
		2) Humidity: 85% under	

# **ADJUSTMENT INSTRUCTIONS**

# 1. Application Object

These instructions are applied to all of the color TV, MC-049B.

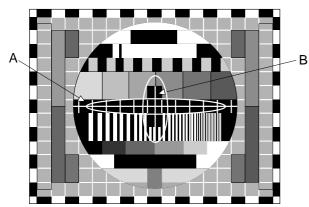
### 2. Notes

- (1) Because this is not a hot chassis, it is not necessary to use an isolation transformer. However, the use of isolation transformer will help protect test instrument.
- (2) Adjustment must be done in the correct order.But the adjustment can be changed by consideration of mass production.
- (3) The adjustment must be performed in the circumstance of 25±5°C of temperature and 65±10% of relative humidity if there is no specific designation.
- (4) The input AC voltage of the receiver must keep rating voltage in adjusting.
- (5) The receiver must be operated for about 15 minutes prior to the adjustment.

# 3. Focus adjustment

# 3.1. Preliminary steps

Tune the TV set to receive a digital pattern. (SVC mode:Automatically mode change the STANDARD MODE)



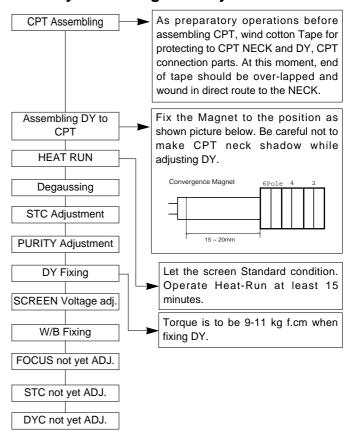
<Fig 1. PAL Digital Pattern(EU05CH)>

# 3.2. Adjustment Method

# 1) Single Focus CPT

Adjust the upper Focus volume of FBT for the best focus of horizontal line A,vertical line B.

# 4. Purity & Convergence adjustment



# 4.1. Color purity adjustment

- (1) It makes CPT enough to demagnetization.
- (2) Receive the signal of red raster.
- (3) Loosen fixed screw of DY and closely to CPT funnel part.
- (4) Check the center of screen that PURITY MAGNET of CPT by crossing adjustment. At this time, 4 & 6 pole magnet is located to magnet of nothing.
- (5) Move the DY to make equal red on whole screen and it does not to make the DY by fixed screw after check a simple color of Red/Green/Blue and white raster whether or not it is a pollution of color.
  - (At this time, take care raster of screen and DY must fixing in the condition which maintains a horizontality.)
- (6) Check the receiver by move direction. When adjustment is not working, adjust with the assisted MAGNET.

# 4.2. Convergence adjustment

These adjustments can the best condition of focus after finished purity adjustment.

- (1) Receive the signal of CROSS HATCH that BACK RASTER is black.
- (2) Adjust brightness and luminosity till dot appear 9 ~12.
- (3) Open angle of the two tab of 4 pole MAGNET by isogonic angle and accord with vertical line of red and blue color in the middle of screen

- (4) Maintain as angle of (3) and rotate the tab to accord with vertical line of Red and Blue color in the middle of screen.
- (5) Open angle of the two tab of 6 pole magnet by isogonic angle and accord with vertical line of Red/Blue and Green.
- (6) Maintain as angle of (5) and rotate the tab to accord with horizontal line. In case of twisted horizontal line,repeat adjustment of (3) ~ (5) remembering the movement of Red/Green/Blue color.
- (7) Move the DY to best condition of convergence and attach the CPT to a rubber-chock for fixed DY.

# 5. Screen voltage adjustment

- Receive the PAL or SECAM(NTSC) signal into RF mode regardless of channel.
- (2) If you press the "ADJ" button in LINE SVC mode(IN-START button), the LINE SVC mode changes to screen adjustment mode
- (3) Adjust the screen volume of FBT jack, When width line is seen turn the FBT screen volume at the position of disappearance it.
- (4) Press the TV/AV button to exit SVC mode.

# 6. White balance adjustment

NOTE: When adjusting white balance automatically,connect the adjustment JIG in SVC mode. (When pressing ,MUTE button on remote control, it changes to CPU OFF MODE and screen displays "AUTO".)

- (1) Receive 100% white pattern.
- (2) Adjust LOW Light status(4.5FL) of CUT R,CUT B at CG:60.
- (3) Adjust HIGH LIght status(35FL) of WDR R,WDR B at WDR G:450.
- (4) Repeat above step (2) and (3) for the best condition each status of High Light and Low Light.

<Table 1> White Balance Color analyzer

Menu	EU	N-EU	
X	288	266	
Υ	295	273	
Color Temperature	9000°K	13000°K	

# <Table 2> White Balance Initial Data

Menu	Menu	Range	DATA
LOW LIGHT	CUT R	0 ~ 511	60
	CUT G	0 ~ 511	60
	CUT B	0 ~ 511	60
HIGH LIGHT	WDR R	0 ~ 511	450
	WDR G	0 ~ 511	450
	WDR B	0 ~ 511	450

# \* Auto adjustment

<Table 3> White Balance Initial Data

### 1. IC

	Name	Maker	Al	gorithi	m
VCD IC	VCT49xyi	Micronas			
EP_ROM	24C16	ST, ATMEL	0	Α	0

### 2. White balance IIC Parameter

Program	TWBeng_v049	Program	TWBeng_v049	Speed	Delay
Vcd Slave	BCF0	Eprom_Slave	AE	1	30

	R_Amp	R_Cut	B_Amp	B_Cut
Program	TWBeng_v049	TWBeng_v049	TWBeng_v049	TWBeng_v049
Sub Add	1C8	1C3	1CA	1C5
Start Bit	12	12	12	12
Stop Bit	4	4	4	4
Offset	0	0	0	0
Polarity	1	1	1	1
EP_Rom_S	9091	8A8B	9495	8E8F

Speed/ Plus         1         1         1         1
---

# <CAUTION> W/B Program "Twbeng\_v049"

- W/B adjustment after Cutoff
- : Instart -> adj. -> mute(cutoff)-> tv/av(wb)
- Release key is EXIT key
- W/B adjustment
  - : Instart -> mute(cpuoff) Release key is TV/AV key

# 7. Deflection setting Data Adjustment

# 7.1 Adjustment preparation

- (1) Tune the TV set to receive an Digital pattern(EU05CH).
- (2) Deflection setting data adjustment is operate by SVC communicator.
- (3) Enter the deflection adjustment mode by selection SERVICE1 on SERVICE MENU after pressing LINE SVC MODE(IN-START KEY).
- (4) Use the CH ▲ ,▼ key to select adjustment item.
- (5) Use the VOL ◀,▶ key to increase/decrease data.

### <Note>

- (1) When adjusting a deflection, adjust N50Hz of PAL signal first and adjust a deflection at Normal 60Hz(NTSC).
- (2) Adjust a deflection as shown below. PAL 4:3 -> NTSC 4:3
- (3) After finishing deflection adjustment, press the ENTER key to exit in adjustment mode.
  - \* Before adjusting the PIP P(PIP Position), store the deflection data in the EEPROM by using the "ENTER" key.

# 7.2 Adjustment

- (1) VL(Vertical Linearity) adjustment:
  - Adjust the top & bottom size of inner circle to be equal.
- (2) VA (Vertical Amplitude) adjustment: Adjust so that the circle of a digital circle pattern should be located interval of 6~7mm from the effective screen of the CPT.
- (3) SC (S correction) adjustment: Adjust so that all distance between each lattice width of top/center/bottom are to be the same.
- \* Setting the CPT Default(Initial data) value like that, because it is decide by CPT DY value

# (4) VS (Vertical Shift) adjustment:

Adjust so that the geometric vertical center line is in accord with vertical center line of CPT.

# (5) HS(Horizontal Shift) adjustment:

Adjust so that the geometric horizontal center line is in accord with horizontal center line of CPT.

# <Table 4> Initial deflection setting data

Menu	Variable range	N50Hz(PAL) FLAT 21"	N60Hz(NTSC) FLAT 21"
VS	-512~511	150	140
VA	-512~511	-12	-12
VL	-512~511	140	140
SC	-512~511	6	6
HS	32~2047	100	123

# **8.OPTION Adjustment**

# 8-1. Preparation for Adjustment

- 1) This option adjustment decides function in accordance with model. Press IN-START button on SVC communicator, then adjust the option at OPTION1 mode.
- 2) Mark the option adjustment data like [111,111,111,111] in BOM.

# 8-2. Adjustment Method

OPTION data input

- 1) Function: YES, No function: NO
- 2) Select each OPTION function by the CH Up/Down button and then set up each OPTION(yes or no) by the VOL Up/Down button.

# 8-3. OPTION 1

Option	Code	Function
INCH	0	21A
	1	21B
	2	21C
	3	29F/25F
	4	28WF/32WF
	5	28N
	6	34F
	7	29N/25N
SYS	0	BG/I/DK
	1	BG/I/DK/L
	2	BG/I/DK/M
	3	BG/L
SOUND	0	RF STEREO
	1	AV STEREO
	2	MONO
	3	MONO DUAL
CH+AU	0	Using
	1	Not using

# 8-4. OPTION2 Function

Option	Code	Function	
AV2	0	Without A/V2	
	1	With AV2	
DVD	0	Without DVD	
	1	With DVD	
SCART1	0	Without SCART1	
	1	With SCART1	
GAME	0	Without GAME function	
	1	With GAME function	
EYE	0	Without EYE	
	1	With EYE	
TX	0	LARGE	
	1	SMALL	
KEY	0	6,8 KEY	
	1	4 KEY	
DEGAU	0	Without DEGAU	
	1	Whit DEGAU	

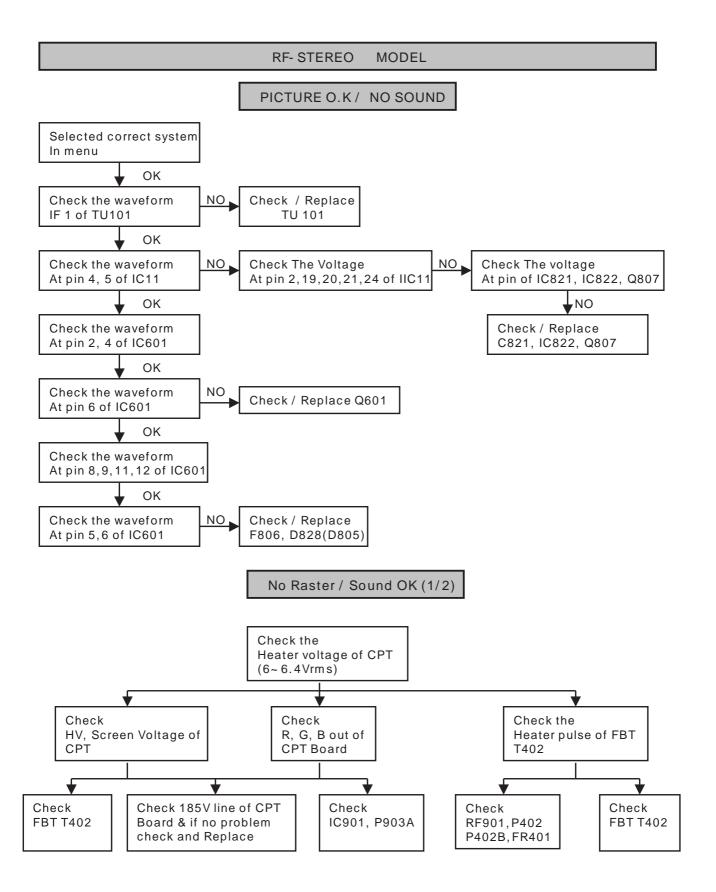
# 8-5. OPTION3 Function

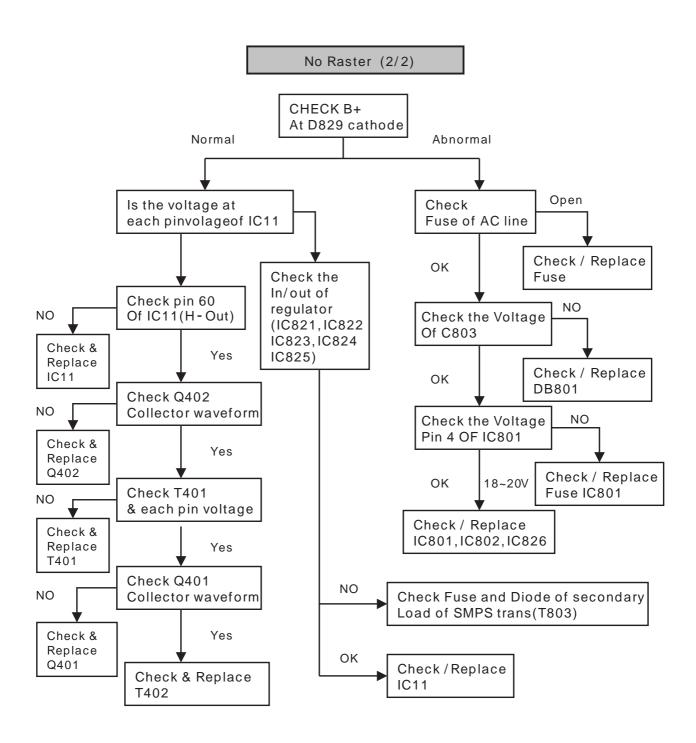
Option	Code	Function
TEXT	0	Without TEXT (200PR)
	1	With TEXT (100PR)
TOP	0	FLOP
	1	TOP
ACMS	0	Without ACMS
	1	With ACMS
I 2 SV	0	Without I 2 SV
	1	With I 2 SV
VOL	0	VOL 0
	1	VOL 1
TSEAR	0	Without TURBO SEARCH
	1	With TURBO SEARCH
T P-S	0	Without TURBO PICTURE/ SOUND
	1	With TURBO PICTURE/ SOUND
HDEV	0	Without HDEV
	1	With HDEV

# 8-6. OPTION4 Function

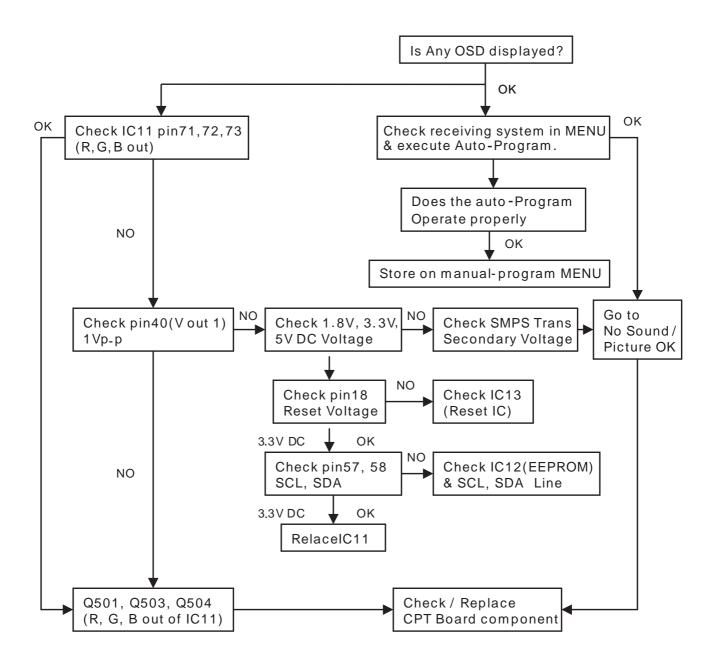
Option	Code	Function
OSD L	0	ENG ONLY
	1	EU-5EA
	2	EU ETC
	3	GREECE
	4	EU-ALL
	5	FARSI
	6	ARAB URDU
	7	E+HINDI
	8	E+I+M+V
	9	E+THAI
	10	E+CHINA
TXT L	0	WEST EU
	1	EAST EU1
	2	TURKEY EU
	3	EAST EU2
	4	CYRILLIC1
	5	CYRILLIC2
	6	CYRILLIC3
	7	TURK GRE1
	8	TURK GRE2
	9	TURK GRE3
	10	ARAB FRA
	11	ARAB ENG
	12	ARAB HEB1
	13	ARAB HEB2
	14	FARS ENG
	15	FARS FA
	16	FARS ALL
	17	AUTO
HOTEL	0	WITHOUT HDEV
	1	WITH HDEV
MAX V	0~	SETTING VOL MAX
	100	

# TROUBLE SHOOTING

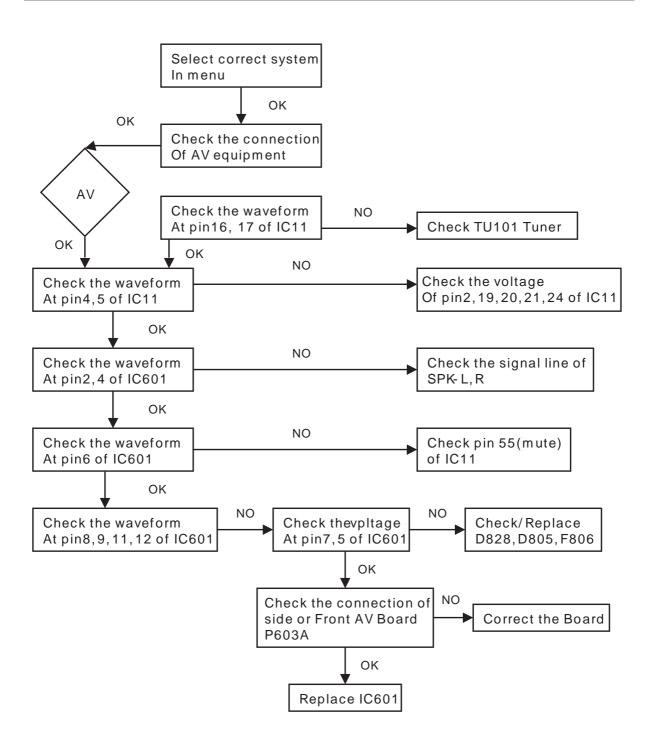




# NO Picture / No Sound

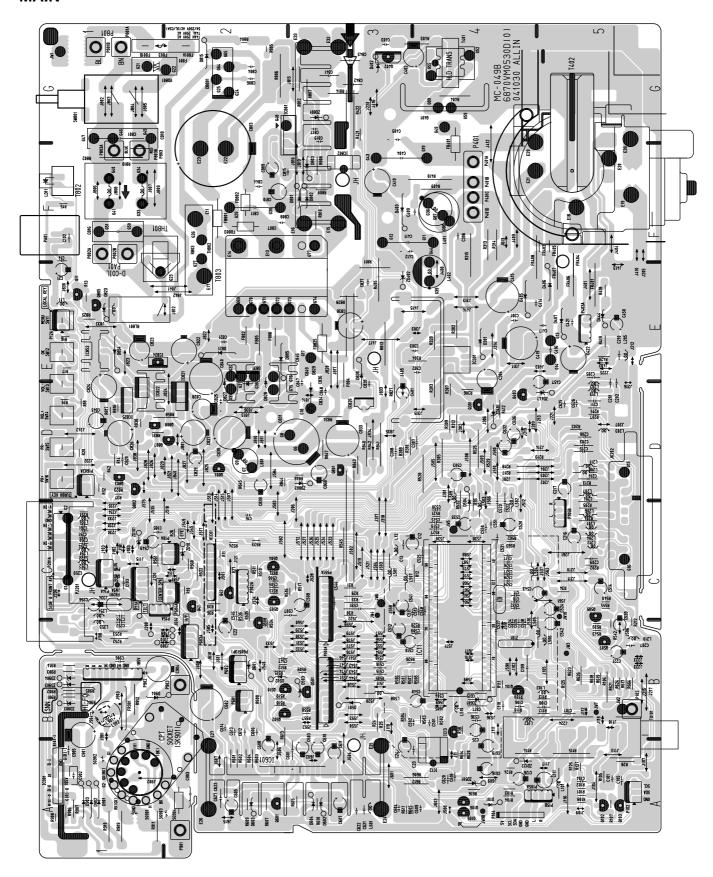


# AV STERRO / MONO MODEL



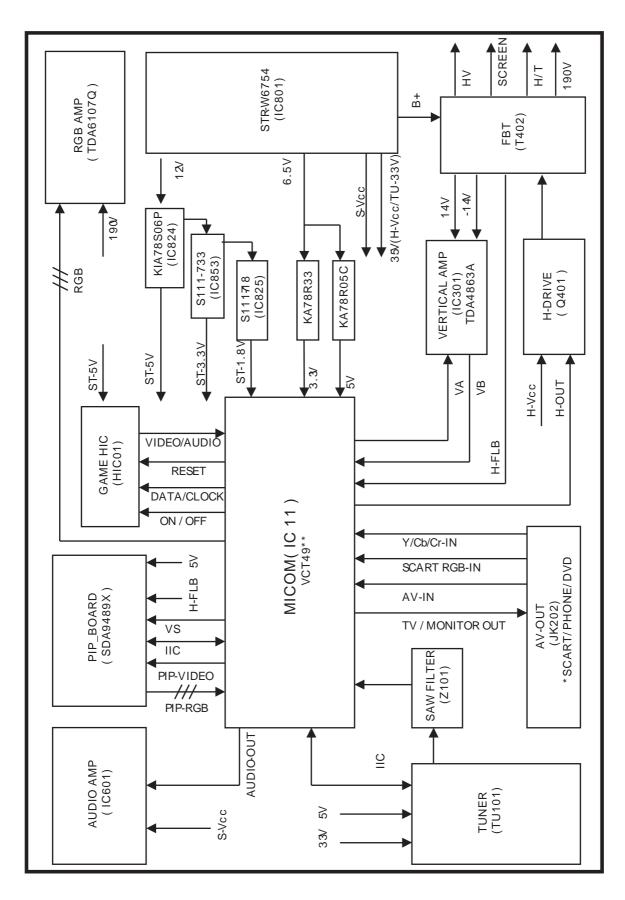
# PRINTED CIRCUIT BOARD

# **MAIN**



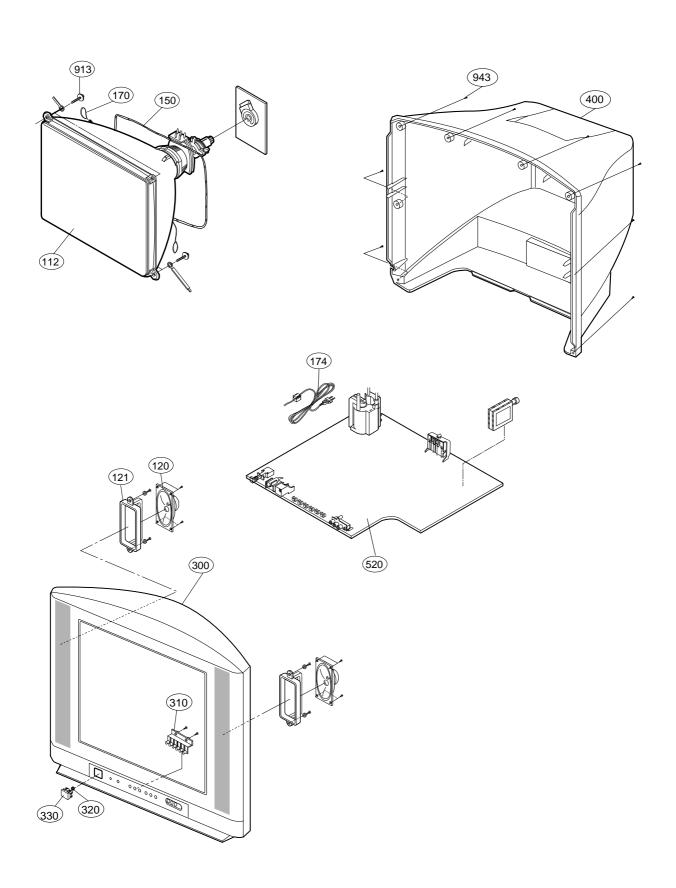
			- COMP	ONENT	LOCATI	ON GUII	DE		
C10C4	C403G3	C541C3	C823E1	D827D2	P803AF1	R36C2	R410F4	R605A4	R904B1
C11C4	C404F3	C542B5	C824D1	D828D2	P803BF1	R37D1	R412D4	R606A4	R905B1
C12C4	C405G3	C543C5	C825D2	D829D3	P902AC2	R38B4	R418E5	R607A2	R906A1
C13C3	C409F4	C544C3	C826D1	D830E3	PA01F1	R39C2	R419E5	R608B2	R907A1
C14F1	C410F3	C545C4	C827D2	D854E1	PJ201C1	R42D1	R420E5	R609A2	R908A1
C16C2	C411F3	C546B2	C828D2	D901A1	Q11E1	R101A5	R421F3	R610A3	R909A1
C21E1	C412F4	C547B2	C829D2	D902A1	Q41C2	R102A5	R422G3	R611A3	R910A1
C22B2	C414E5	C548C4	C830D2	D903A1	Q42C2	R103A4	R501B3	R612A4	R911A2
C23A4	C415E4	C549C1	C831D3	D904B2	Q102A5	R104A4	R502B4	R613B3	R912B1
C25B4	C416E5	C550C4	C833D3	DB801G2	Q103A5	R105A5	R503B4	R614A4	R914B1
C101A5	C417E5	C551C4	C834D3	HIC01C2	Q104B4	R106B5	R504B3	R615A3	RL801E1
C102F1	C419E4	C601A3	C835E3	IC11B4	Q105A4	R107A5	R505B3	R616A4	SG901A1
C103C1	C421E5	C602B2	C836E3	IC12A4	Q106A4	R108A5	R506B3	R617B5	SG902A1
C104A5	C422E5	C603A3	C837E3	IC13B4	Q301D4	R109B4	R507B4	R618B5	SG903A2
C105A5	C450E5	C604A3	C838E3	IC301E4	Q401G4	R110B4	R508B4	R619B5	SG904A2
C106B4	C457D5	C605A2	C839D2	IC601A3	Q402G3	R111B4	R509B3	R620A4	SK901A1
C107B5	C501B4	C606B2	C840E2	IC801G2	Q403D4	R112B5	R510C2	R621B5	SW11E1
C108B5	C502B4	C607A3	C841G3	IC802F3	Q501B3	R113B5	R511C2	R623B5	SW12E1
C109B4	C503D4	C608B2	C842G3	IC821D2	Q502B2	R114A5	R512B3	R624B5	SW13D1
C110B4	C504B4	C609A4	C843G3	IC822E1	Q503C2	R115A5	R513C3	R626B5	SW14D1
C111A5	C505C3	C610A3	C844F2	IC824E1	Q504C2	R124A4	R514C3	R664B5	SW15D1
C126A4	C506C3	C611A3	C845D1	IC825D1	Q505C5	R125B5	R515B3	R802F1	SW16D1
C185C1	C507C3	C612B2	C846E3	IC826D3	Q507B5	R126A5	R516C3	R803E2	SW801G1
C201D5	C508C3	C613B2	C847D3	IC853E1	Q508B2	R127A5	R517C3	R804G2	T401G4
C202D5	C509B4	C614B2	C848D3	IC901A1	Q510B2	R202C5	R518B3	R805G2	T402F5
C203D5	C510B3	C615B4	C849D3	P102A5	Q601A2	R203D5	R519B3	R806G2	T802F1
C204C5	C511C4	C616A4	C868D3	P103B5	Q801D3	R204C5	R520B4	R807G3	T803F3
C205E5	C512B3	C617B4	C901B1	P104A4	Q802D1	R205C5	R521C4	R808F3	TH801F1
C206D5	C513C4	C618A4	C902A1	P601B2	Q803D1	R207D5	R522C2	R809F3	TH802F2
C207B5	C514C5	C619A4	C903A2	P602B2	Q804D2	R212C5	R523C2	R810F3	TU101B5
C209C5	C515B3	C620A4	C904B2	P605B2	Q805E1	R213D5	R524C2	R811E3	VD801G1
C210E5	C516B3	C621A3	C905A1	P901A2	Q807D2	R215D5	R525D4	R812G3	X11C4
C211D5	C517C4	C622A3	C906B1	P902B1	Q808D2	R217D5	R526B4	R813E3	Z101B4
C214D5	C518B3	C623A2	D101A4	P903B2	R10C2	R218D5	R527C4	R814G3	ZD10C2
C215D5	C519C4	C625D5	D301E4	P105AA5	R11C2	R219D5	R528D4	R816D1	ZD101C1
C216C5	C520C4	C626D5	D402G3	P105BC5	R12C4	R251C1	R529D4	R817D1	ZD122A4
C217D5	C521C4	C627A2	D403F3	P10AC2	R13E1	R252B1	R532C4	R818F1	ZD401D4
C221B5	C522C4	C632D4	D405E4	P11AC1	R14D1	R253B1	R534B2	R823D1	ZD402E3
C251C1	C523C4	C636D4	D406E5	P12AE1	R15F1	R302E4	R535B2	R824D3	ZD447D5
C252B1 C253C1	C524C5 C525C4	C801G1 C803F2	D407E5 D444E5	P14AC1 P15AC2	R16E1 R17E1	R303D4 R304E4	R536B2	R825E1 R827D3	ZD501A4 ZD601B4
C253C1		C804G2		P15BA5	R18D1	R304E4	R539B5		ZD801G3
C254C1	C526C4 C527C4	C806G2	D501B3 D502B2	P1602AD1	R19D1	R306D4	R540C5 R542C5	R828E3 R831D2	
C256C1	C527C4	C807F3	D502B2	P201AC1	R20D1	R307D4	R543B5	R838D1	ZD803D3 ZD902B1
C259C1	C529C4	C808F3	D503D3	P401AF4	R24B3	R308D3			
C260C1	C530C4	C809F2	D601B2	P401BF4	R25B3	R309D4	R545C3 R555C5	R840D3 R841D3	ZD903B1 ZD904B1
C261C1	C531C3	C810F2	D602A3	P401CF4	R26C2	R310D4	R557B3	R842D3	2090401
C301E4	C532C4	C811F2	D603A2	P401DF4	R27C2	R312D4	R558B3	R843D3	
C302E4	C533C4	C815F3	D604A3	P403AE5	R28A5	R313F4	R560C2	R844D3	
C303E4	C534B4	C816F1	D801F3	P551AC3	R29C3	R314F4	R561C2	R845D2	
C304D4	C535B4	C817G3	D802F3	P603AB2	R30C3	R315F4	R562C4	R846D3	
C306F4	C536B4	C818G1	D803F3	P604AC2	R31C3	R328E4	R563C4	R847D3	
C307D4	C537C4	C819G3	D805E3	P801AG1	R32D1	R403G4	R601A2	R858D1	
C308D3	C538B4	C820D1	D815G2	P801BG1	R33C3	R404G4	R602A2	R901B1	
C401D3	C539C5	C821E2	D821E2	P802AF1	R34C5	R405F3	R603A2	R902B1	
C402G4	C540B4	C822E2	D823E1	P802BF1	R35C4	R409F4	R604A2	R903B1	

# **BLOCK DIAGRAM**



# **MEMO**

# **EXPLODED VIEW**



# **EXPLODED VIEW PARTS LIST**

LOCA. No.	PART No.	DESCRIPTIONS
<b>≜</b> 112	6335V21017A	CPT ASSEMBLY, A51QDX993X005 N(+0.40G) 0G SDIH FLAT(MST,ITC),ZH 36
120	120-C77M	SPEAKER,FULLRANGE C122P02K1459 ESTEC 8 OHM 10/15W 130DB 57*117MM
121	4810V00088B	BRACKET, SPEAKER CE-29K30
₾ 150	150-D02X	COIL,DEGAUSSING CU 21" 60TURN 12 OHM D02N (NYLON)
₾ 170	170-A01N	CPT EARTH, 21" 64T 2LUG 1P HSG CL-21Q20ET(PC-99DA)
₾ 174	174-009E	POWER CORD, POWER(W/HOLD,HOUSING,L=200,4.0
300	3091V00495B	CABINET ASSEMBLY, RZ-21FB55RX STEREO MC049B LGEMA
	3091V00495E	CABINET ASSEMBLY, RZ-21FB55MX MONO E_PHONE MC049B MA->MK
310	5020V00763C	BUTTON, CONTROL RZ-21FB55RX ABS, HF-380 6KEY MC-049B, MA LOCAL
320	320-062E	SPRING, KNOB
330	5020V00764B	BUTTON, POWER RZ-21FB55RX ABS, HF-380 1KEY LGEMA
400	3809V00342B	BACK COVER ASSEMBLY, RZ-21FB55RX NON LGEMA
520	6871VMM794A	PWB(PCB) ASSEMBLY,MAIN MC049B RZ-21FB55RX.LDSLML8.
520	6871VMM796R	PWB(PCB) ASSEMBLY,MAIN MC049B RZ-21FB55RX.LSSLMS8 M/I
	6871VMM796S	PWB(PCB) ASSEMBLY,MAIN MC049B RZ-21FB55RX.LBSLMB8 M/I
	6871VMM796V	PWB(PCB) ASSEMBLY,MAIN MC049B RZ-21FB55RX.LSSLMR8 M/I
	6871VMM796W	PWB(PCB) ASSEMBLY,MAIN MC049B RZ-21FB55RX.LSSLMP8 M/I
	6871VMM863F	PWB(PCB) ASSEMBLY,MAIN MC049B RZ-21FB55MX.LUSLMH8 M/I
	6871VMM863G	PWB(PCB) ASSEMBLY,MAIN MC049B RZ-21FB55RX.LUSLMH8 M/I
913	332-057J	SCREW,DRAWING PAN WASHER 6mm 35mm NON
943	1PTF0403116	SCREW TAP TITE(P),TRUSS HEAD + D4.0 L16.0 MSWR3/FZB

# **REPLACEMENT PARTS LIST**

For Capacitor & Resistors, the charactors at 2nd and 3rd digit in the P/No. means as follows;

D406

D406

D407

D501

D502

D503

0DRTW00164B

0DD060009AC

0DD414809ED

0DD414809ED

0DD414809ED

CC, CX, CK, CN : Ceramic CQ : Polyestor CE : Electrolytic RD : Carbon Film RS : Metal Oxide Film RN : Metal Film RF : Fusible

LOCA. NO	PART NO	DESCRIPTION
		IC
IC12	0IMMRSG036C	M24C16-WBN6 8PIN PDIP ST 16M
IC13	0ILNRKE020B	KIA7027AP KEC TO-92 3P TP RE-SET IC
IC301	0IPMGPH002A	TDA4863A 7P SOT524-1 ST
IC601	0IPMGSA021C	LA42152 13P ST 15W 2CH AUDIO AMP
IC801	0IPMGSK016B	STR-W6754 SANKEN 7PIN T0220F ST
IC802	0ILI817000G	LTV817M-VB 4P,DIP BK PHOTO COUPLER
IC821	0IMCRKE019A	KIA78R33API KEC 4P TO220 ST 3.3V 1A
IC822	0IMCRKE018A	KIA78R05API KEC 4P TO220 ST 5V 1A
IC824	0IMCRKE020A	KIA78S06P KEC 3P TO-92 TP 6V 0.15A
IC825	0IMCRAU003A	S1117-18PIC 3P TO220F ST 1.8V 1A
IC826	0ISK110000A	SE110N(LF12) 3P 110V ERROR AMP
IC853	0IMCRAU004A	S1117-33PIC 3P TO220F ST 3.3V 1A
IC901	0IPH610700B	TDA6107JF/N3 9P ST RGB AMP
	Т	RANSISTOR
Q104	0TR319709AB	KTC3197,TP(KTC388A),KEC
Q11	0TR126609AA	KTA1266-Y(KTA1015) TP TO92 50V 150MA
Q301	0TR198009BA	2SA1980Y TP AUK
Q401	0TRSA10004A	TT2170LS-YB11 ST TO-220FM 1500V 5A
Q402	0TR233109AA	KSC2331-Y TP SAMSUNG TO-92L -
Q501	0TR198009BA	2SA1980Y TP AUK
Q502	0TR198009BA	2SA1980Y TP AUK
Q503	0TR198009BA	2SA1980Y TP AUK
Q504	0TR198009BA	2SA1980Y TP AUK
Q505	0TR534309AA	2SC5343Y TP AUK
Q507	0TR198009BA	2SA1980Y TP AUK
Q508	0TR534309AA	2SC5343Y TP AUK
Q510	0TR534309AA	2SC5343Y TP AUK
Q601	0TR198009BA	2SA1980Y TP AUK
Q802	0TR534309AA	2SC5343Y TP AUK
Q803	0TR102009AB	KRC102M(KRC1202) KEC TP
Q805	0TR534309AA	2SC5343Y TP AUK
Q807	0TR127409AB	KTA1274-Y TO-92L TP KEC
Q808	0TR102009AB	KRC102M(KRC1202) KEC TP
Q808	0TR102009AB	KRC102M(KRC1202) KEC TP
		DIODE
D301	0DD400509AA	1N4005 TP KEC
D403	0DRTW00164B	RGP15J TP52 DO15 .V 1.5A 50A 250NSEC 100UA
D405	0DD060009AC	TVR06J TP - 600V 250NSEC -
D405	0DRTW00164B	RGP15J TP52 DO15 .V 1.5A 50A 250NSEC 100UA

0DD060009AC | TVR06J TP - 600V 250NSEC -

RGP15J TP52 DO15 .V 1.5A 50A 250NSEC 100UA

TVR06J TP - 600V 250NSEC -

1N4148 TP GRANDE

1N4148 TP GRANDE

1N4148 TP GRANDE

LOCA. NO	PART NO	DESCRIPTION
D504	0DD414809ED	1N4148 TP GRANDE
D601	0DD414809ED 0DD414809ED	1N4148 TP GRANDE
D602	0DD414809ED	1N4148 TP GRANDE
D602	0DD414809ED	1N4148 TP GRANDE
D603	0DD414809ED	1N4148 TP GRANDE
D801	0DD1100009AM	EU1ZV(1) TP SANKEN
D802	0DD100009AM	EU1ZV(1) TP SANKEN
D803	0DD100009AM	EU1ZV(1) TP SANKEN
D815	0DD060009AC	TVR06J TP - 600V 250NSEC
D821	0DD060009AC	TVR06J TP - 600V 250NSEC
D823	0DD414809ED	1N4148 TP GRANDE
D827	0DRTW00141A	SFAF504G ST ITO220 200V 5A .A .SEC 10UA
D828	0DRTW00141A	SFAF504G ST ITO220 200V 5A .A .SEC 10UA
D829	0DD300009AC	RU3AMV(1) TP SANKEN
D830	0DD060009AC	TVR06J TP - 600V 250NSEC
D854	0DD060009AC	TVR06J TP - 600V 250NSEC
D901	0DR210009AC	BAV21 TP DO35 200V 0.2A 1A 50SEC 100A
D902	0DR210009AC	BAV21 TP DO35 200V 0.2A 1A 50SEC 100A
D903	0DR210009AC	BAV21 TP DO35 200V 0.2A 1A 50SEC 100A
D904	0DR140049AC	1N4004A T-81 TP DO41 500V 1.0A 30A - 10UA
DB801	0DRTW00131A	D2SB60 ST GBL 600V 1.5A .A .SEC 10UA
ZD101	0DZ510009BF	GDZ5.1B TP GRANDE DO34 0.5W 5.1V 0.02A
ZD122	0DZ330009DG	GDZJ33B TP GRANDE DO34 0.5W 33.0V
ZD401	0DZ510009BF	GDZ5.1B TP GRANDE DO34 0.5W 5.1V 0.02A
ZD402	0DZ240009CG	MTZJ24B TP DO34 - 24V 5UA
ZD501	0DZ110009AD	MTZJ11B TP DO34 - 11V 5UA
ZD601	0DZ820009AH	MTZJ8.2B TP DO34 - 8.2V 5UA
ZD801	0DZ620009AH	MTZJ6.2A TP DO34 0.5W 6.2V 150UA
ZD803	0DZ560009CF	MTZJ5.6B TP DO34 0.5W 5.6V 5UA
		CAPACITOR
C10	0CX2200K409	22P 50V J SL TA52
C101	0CQ2721N409	0.0027UF D 100V 5% PE TP5
C103	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C104	0CN1030F679	10000PF D 16V 20% X5R TA52
C106	0CN1030F679	10000PF D 16V 20% X5R TA52
C107	0CN1030F679	10000PF D 16V 20% X5R TA52
C108	0CN1030F679	10000PF D 16V 20% X5R TA52
C109	0CN1030F679	10000PF D 16V 20% X5R TA52
C11	0CX2200K409	22P 50V J SL TA52
C110	0CN1030F679	10000PF D 16V 20% X5R TA52
C111	0CE227DD618	220UF STD 10V M FL TP5
C12	0CE107DD618	100UF STD 10V M FL TP5
C126	0CE475DK618	4.7UF STD 50V 20% FL TP 5
C13	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C14	0CN1020K519	1000PF D 50V 10% B(Y5P) TA52
C201	0CN1010K519	100PF D 50V 10% B(Y5P) TA52
C202	0CN1010K519	100PF D 50V 10% B(Y5P) TA52
C203	0CN4710K519	470P 50V K B TA52

For Capacitor & Resistors, the charactors at 2nd and 3rd digit in the P/No. means as follows;

CC, CX, CK, CN : Ceramic CQ : Polyestor CE : Electrolytic RD : Carbon Film RS : Metal Oxide Film RN : Metal Film RF : Fusible

	DARTHO	DECODINE ION
LOCA. NO	PART NO	DESCRIPTION
C204	0CN4710K519	470P 50V K B TA52
C205	0CN1010K519	100PF D 50V 10% B(Y5P) TA52
C205	0CN4710K519	470P 50V K B TA52
C206	0CN4710K519	470P 50V K B TA52
C209	0CN4710K519	470P 50V K B TA52
C21	0CE107DD618	100UF STD 10V M FL TP5
C211	0CN1010K519	100PF D 50V 10% B(Y5P) TA52
C211	0CN4710K519	470P 50V K B TA52
C214	0CN4710K519	470P 50V K B TA52
C215	0CN4710K519	470P 50V K B TA52
C216	0CE226DF618	22UF STD 16V M FL TP5
C217	0CE226DF618	22UF STD 16V M FL TP5
C221	0CE476DH618	47UF STD 25V 20% FL TP 5
C23	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C24	0CE226DD618	22UF STD 10V 20% FL TP 5
C25	0CE105DK618	1UF STD 50V M FL TP5
C252	0CN2710K519	270P 50V K B TA52
C253	0CN1010K519	100PF D 50V 10% B(Y5P) TA52
C254	0CN1010K519	100PF D 50V 10% B(Y5P) TA52
C255	0CN2710K519	270P 50V K B TA52
C256	0CE106DH618	10UF STD 25V M FL TP5
C260	0CN1010K519	100PF D 50V 10% B(Y5P) TA52
C261	0CN4710K519	470P 50V K B TA52
C303	0CQ1041N409	0.1UF D 100V 5% PE TP5
C304	0CE107DJ618	100UF STD 35V M FL TP5
C306	0CQ3331N509	0.033UF D 100V 10% PE TP5
C402	0CE475DK618	4.7UF STD 50V 20% FL TP 5
C403	0CQ1521N509	0.0015UF D 100V 10% PE TP5
C404	181-015E	MPP 1600V 0.0068UF H
C405	181-091U	R 220PF 2KV 10%,-10% R/TP TP7.5
C409	0CK8210W515	820P 500V K B TS
C410	0CE475DP618	4.7UF STD 160V 20% FL TP 5
C411	181-013P	MPP 400V 0.33UF J
C414	0CK2710W515	270P 500V KB TS
C415	0CE477DH618	470UF STD 25V M FL TP5
C416	181-009R	PP 200V 0.022UF K
C417	0CK2710W515	270P 500V KB TS
C419	0CE477DH618	470UF STD 25V M FL TP5
C421	0CK2710W515	270P 500V KB TS
C422	0CE475DR618	4.7UF STD 250V 20% FL TP 5
C501	0CQ6831N509	0.068UF D 100V 10% PE TP5 0.068UF D 100V 10% PE TP5
C502	0CQ6831N509	
C503	0CE475DK618	4.7UF STD 50V 20% FL TP 5
C504	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C505	0CN2710K519	270P 50V K B TA52
C506	0CN2710K519	270P 50V K B TA52
C508	0CE107DD618	100UF STD 10V M FL TP5
C509	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52 4.7UF STD 50V 20% FL TP 5
C510	0CE475DK618	
C511 C512	0CN1040K949 0CE107DD618	0.1UF D 50V 80%,-20% F(Y5V) TA52 100UF STD 10V M FL TP5
C512	0CE107DD618 0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
0013	00N1040N949	0.101 D 30V 60%,-20% F(13V) IA32

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LOCA. NO	PART NO	DESCRIPTION
C514	0CE107DD618	100UF STD 10V M FL TP5
C515	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C515	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C516	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C516	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C517	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C518	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C518	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C519	0CN1010K519	100PF D 50V 10% B(Y5P) TA52
C520	0CE107DD618	100UF STD 10V M FL TP5
C521	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C523	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C524	0CE107DD618	100UF STD 10V M FL TP5
C525	0CN3310K519	330P 50V K B TA52
C526	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C527	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C528	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C529	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C530	0CN1010K519	100PF D 50V 10% B(Y5P) TA52
C531	0CN1010K519	100PF D 50V 10% B(Y5P) TA52
C532	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C533	0CE107DD618	100UF STD 10V M FL TP5
C534	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C535	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C536	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C537	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C538	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C540	0CE107DD618	100UF STD 10V M FL TP5
C541	0CE107DD618	100UF STD 10V M FL TP5
C542	0CE107DD618	100UF STD 10V M FL TP5
C543	0CE107DD618	100UF STD 10V M FL TP5
C545	0CX2200K409	22P 50V J SL TA52
C546	0CN1510K519	150P 50V K B TA52
C547	0CN2710K519	270P 50V K B TA52
C548	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C550	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C601	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C602	0CE108DH618	1000UF STD 25V M FL TP5
C602	0CE477DH618	470UF STD 25V M FL TP5
C603	0CE475DK618	4.7UF STD 50V 20% FL TP 5
C604	0CQ2231N509	0.022UF D 100V 10% PE TP5
C605	0CE476DF618	47UF STD 16V M FL TP5
C606	181-007C	MPE ECQ-V1H104JL3(TR), 50V 0.1UF
C607	0CE106DF618	10UF STD 16V M FL TP5
C608	0CE106DF618	10UF STD 16V M FL TP5
C609	0CQ2231N509	0.022UF D 100V 10% PE TP5
C610	0CE475DK618	4.7UF STD 50V 20% FL TP 5
C611	0CE476DH618	47UF STD 25V 20% FL TP 5
C612	181-007C	MPE ECQ-V1H104JL3(TR), 50V 0.1UF
C613	181-007C	MPE ECQ-V1H104JL3(TR), 50V 0.1UF
C614	181-007C	MPE ECQ-V1H104JL3(TR), 50V 0.1UF
C615	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52

For Capacitor & Resistors, the charactors at 2nd and 3rd digit in the P/No. means as follows;

CC, CX, CK, CN : Ceramic CQ : Polyestor CE : Electrolytic

RD : Carbon Film RS : Metal Oxide Film RN : Metal Film RF : Fusible

LOCA. NO	PART NO	DESCRIPTION
C616	0CE476DD618	47UF STD 10V 20% FL TP 5
C617	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C618	0CN1010K519	100PF D 50V 10% B(Y5P) TA52
C619	0CE335DK618	3.3UF STD 50V 20% FL TP 5
C620	0CN1010K519	100PF D 50V 10% B(Y5P) TA52
C625	0CQ5631N409	0.056UF D 100V 5% PE TP5
C626	0CQ5631N409	0.056UF D 100V 5% PE TP5
C627	0CK1030K945	0.01UF 50V Z F TR
C632	0CQ5631N409	0.056UF D 100V 5% PE TP5
C636	0CQ5631N409	0.056UF D 100V 5% PE TP5
C803	181-001E	LUG 120UF 400V 20% T
C804	0CK10201515	1000P 1KV K B TS
C806	0CK10201515	1000P 1KV K B TS
C807	181-091P	SL 270PF 1KV 10%,-10% R/TP TP5
C807	181-091X	R 560PF 2KV 10%,-10% R/TP TP7.5
C807	0CE105DK618	1UF STD 50V M FL TP5
C809	0CE336DK618	33UF STD 50V M FL TP5
C810	181-011B	0.001UF D 1.6KV J M/PP NI FM20
	0CK8210K515	
C815	0CR8210R919 0CQZVBK002A	
C816 C817	0CK1040K945	A.C 275V 0.1UF M (S=15) 0.1UF 50V Z F TR
C818 C819	0CQZVBK002C	A.C 275V 0.22UF K (S=22.5)
	0CK1520K515	1500P 50V K B TS
C820	0CN1040K949	0.1UF D 50V 80%,-20% F(Y5V) TA52
C821	0CK4710W515	470PF 500V K B TR
C822	0CE477BH618 0CE107DD618	470UF KME TYPE 25V 20% FL TP 5 100UF STD 10V M FL TP5
C823 C824	0CE477BD618	470UF KME TYPE 10V 20% FL TP 5
C824	0CE477BD618	4700F KME 11FE 10V 20% FL 1F 3
C825	181-091P	SL 270PF 1KV 10%,-10% R/TP TP5
C825	0CE227DD618	220UF STD 10V M FL TP5
C827	0CE477DD618	470UF STD 10V M FL TP5
C828	0CE477BF618	470UF KME 16V M FL TP5
C829	0CE335CK636	3.3UF SHL,SD 50V 20% FM5 BP(D) TP
C830	0CE108DH618	1000UF STD 25V M FL TP5
C831	0CE227DP61A	220UF STD 160V 20% FL TP 7.5
C833	0CE476CP618	47UF SHL,SD 160V 20% FL TP 5
C834	181-091X	R 560PF 2KV 10%,-10% R/TP TP7.5
C835	0CK4710W515	470PF 500V K B TR
C837	0CQ4731N509	0.047UF D 100V 10% PE TP5
C838	0CE227DK618	220UF STD 50V M FL TP5
C840	0CE228BF618	2200UF KME 16V M FL TP5
C843	181-120K	2200PF 4KV M E FMTW LEAD 4.5
C845	0CE107DD618	100UF STD 10V M FL TP5
C847	181-091P	SL 270PF 1KV 10%,-10% R/TP TP5
C901	0CE475DR618	4.7UF STD 250V 20% FL TP 5
C902	0CQ1044R539	0.1UF TE 250V 10% M/PE NI TP5
C903	181-033S	2KV B 122K TP7.5
C904	0CE475DR618	4.7UF STD 250V 20% FL TP 5
		L & INDUCTOR
J210	0LA0102K119	INDUCTOR,AXIAL LEAD 10UH K 2.3*3.4 TP
J2 10	0E/101021(113	115001011, WINE LEAD 100111 2.3 3.4 1F

LOCA. NO	PART NO	DESCRIPTION
L101	0LA0102K139	INDUCTOR,AXIAL LEAD 10UH K 4*10.5 TP
L103	0LA0101K119	INDUCTOR,AXIAL LEAD 1.0UH K 2.3*3.4 TP
L11	0LA0102K119	INDUCTOR,AXIAL LEAD 10UH K 2.3*3.4 TP
L12	0LA0101K119	INDUCTOR,AXIAL LEAD 1.0UH K 2.3*3.4 TP
L201	0LA0102K119	INDUCTOR,AXIAL LEAD 10UH K 2.3*3.4 TP
L202	0LA0102K119	INDUCTOR,AXIAL LEAD 10UH K 2.3*3.4 TP
L204	0LA0102K119	INDUCTOR,AXIAL LEAD 10UH K 2.3*3.4 TP
L206	0LA0102K119	INDUCTOR,AXIAL LEAD 10UH K 2.3*3.4 TP
L207	0LA0102K119	INDUCTOR,AXIAL LEAD 10UH K 2.3*3.4 TP
L208	0LA0102K119	INDUCTOR,AXIAL LEAD 10UH K 2.3*3.4 TP
L211	0LA0102K119	INDUCTOR,AXIAL LEAD 10UH K 2.3*3.4 TP
L213	0LA0102K119	INDUCTOR,AXIAL LEAD 10UH K 2.3*3.4 TP
L251	0LA0102K119	INDUCTOR,AXIAL LEAD 10UH K 2.3*3.4 TP
L252	0LA0102K119	INDUCTOR, AXIAL LEAD 10UH K 2.3*3.4 TP
L253	0LA0472K119	INDUCTOR,AXIAL LEAD 47UH K 2.3*3.4 TP
L254	0LA0472K119	INDUCTOR,AXIAL LEAD 47UH K 2.3*3.4 TP
L401	6140VE0001V	COIL,LINEARITY 60UH 0.6PHY 69.5TURN
L402	6140VB0001F	COIL,CHOKE 130UH 0.45PHY 55.5TURN
L501	0LA0102K119	INDUCTOR,AXIAL LEAD 10UH K 2.3*3.4 TP
L502	0LA0102K119	INDUCTOR.AXIAL LEAD 10UH K 2.3*3.4 TP
L503	0LA0102K119	INDUCTOR, AXIAL LEAD 10UH K 2.3*3.4 TP
L504	0LA0101K119	INDUCTOR, AXIAL LEAD 1.0UH K 2.3*3.4 TP
L505	0LA0102K119	INDUCTOR,AXIAL LEAD 10UH K 2.3*3.4 TP
L506	0LA0102K119	INDUCTOR,AXIAL LEAD 10UH K 2.3*3.4 TP
L507	0LA0101K119	INDUCTOR,AXIAL LEAD 1.0UH K 2.3*3.4 TP
L508	0LA0101K119	INDUCTOR,AXIAL LEAD 1.0UH K 2.3*3.4 TP
L509	0LA0102K119	INDUCTOR, AXIAL LEAD 10UH K 2.3*3.4 TP
L510	0LA0821K119	INDUCTOR,AXIAL LEAD 8.2UH K 2.3*3.4 TP
L801	150-C02F	COIL,CHOKE82UH PHY TURN
T401	151-C02F	TRANSFORMER, H-DRIVE,EI-19,BULK
T803	6170VMCA43J	TRANSFORMER,SMPS[COIL]EER3940 400UH
		RESISTOR
C210	0RD0102F609	10 OHM 1/6 W 5% TA52
F802	0RP0050H709	0.05 OHM 1/2 W 10% TA52
F804	0RP0050H709	0.05 OHM 1/2 W 10% TA52
F805	0RP0020J809	0.02 OHM 1 W 20% TA52
F806	0RP0020J809	0.02 OHM 1 W 20% TA52
FR401	0RF0101K607	1 OHM 2 W 5.00% TA62
FR406	0RF0101J607	1 OHM 1 W 5.00% TA62
FR407	0RF0470J607	0.47 OHM 1 W 5.00% TA62
FR408	0RF0470J607	0.47 OHM 1 W 5.00% TA62
FR901	0RF0101K607	1 OHM 2 W 5.00% TA62
FR901	0RF0161K607	1.6 OHM 2 W 5.00% TA62
J201	0RD1000F609	100 OHM 1/6 W 5% TA52
J211	0RD1000F609	100 OHM 1/6 W 5% TA52
J402	0RD0752F609	75 OHM 1/6 W 5.00% TA52
J506	0RD3000F609	300 OHM 1/6 W 5.00% TA52
L205	0RD0102F609	10 OHM 1/6 W 5% TA52
L509	0RD3000F609	300 OHM 1/6 W 5.00% TA52
R102	0RD6801F609	6.8K OHM 1/6 W 5.00% TA52
D400	00000000000	50 OUNA 4/0 W/ 5 000/ TA 50

R109

0RD0562F609

56 OHM 1/6 W 5.00% TA52

For Capacitor & Resistors, the charactors at 2nd and 3rd digit in the P/No. means as follows;

CC, CX, CK, CN : Ceramic CQ : Polyestor CE : Electrolytic RD : Carbon Film RS : Metal Oxide Film RN : Metal Film RF : Fusible

LOCA. NO	PART NO	DESCRIPTION
R110	0RD8200F609	820 OHM 1/6 W 5.00% TA52
R111	0RD0682F609	68 OHM 1/6 W 5.00% TA52
R112	0RD1501F609	1.5K OHM 1/6 W 5% TA52
R113	0RD3000F609	300 OHM 1/6 W 5.00% TA52
R12	0RD1000F609	100 OHM 1/6 W 5% TA52
R124	0RD2202F609	22K OHM 1/6 W 5% TA52
R124	0RD2202F609	22K OHM 1/6 W 5% TA52
R125	0RD2700A609	270 OHM 1/2 W(7.0) 5.00% TA52
R126	0RD1000F609	100 OHM 1/6 W 5% TA52
R127	0RD1000F609	100 OHM 1/6 W 5% TA52
R13	0RD1301F609	1.3K OHM 1/6 W 5.00% TA52
R14	0RD4701F609	4.7K OHM 1/6 W 5% TA52
R15	0RD3300F609	330 OHM 1/6 W 5.00% TA52
R16	0RD2200F609	220 OHM 1/6 W 5.00% TA52
R17	0RD3000F609	300 OHM 1/6 W 5.00% TA52
R18	0RD3300F609	330 OHM 1/6 W 5.00% TA52
R19	0RD3900F609	390 OHM 1/6 W 5% TA52
R20	0RD4300F609	430 OHM 1/6 W 5.00% TA52
R202	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R203	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R204	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R205	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R207	0RD5602F609	56K OHM 1/6 W 5% TA52
R212	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R213	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R215	0RD2402F609	24K OHM 1/6 W 5.00% TA52
R217	0RD1000F609	100 OHM 1/6 W 5% TA52
R218	0RD1000F609	100 OHM 1/6 W 5% TA52
R24	0RD1000F609	100 OHM 1/6 W 5% TA52
R25	0RD1000F609	100 OHM 1/6 W 5% TA52
R251	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R252	0RD1200A609	120 OHM 1/2 W(7.0) 5.00% TA52
R253	0RD1200A609	120 OHM 1/2 W(7.0) 5.00% TA52
R28	0RD1000F609	100 OHM 1/6 W 5% TA52
R28	0RD1000F609	100 OHM 1/6 W 5% TA52
R29	0RD1000F609	100 OHM 1/6 W 5% TA52
R30	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R302	0RN3602F409	36K OHM 1/6 W 1.00% TA52
R303	0RD2400A609	240 OHM 1/2 W(7.0) 5.00% TA52
R304	0RD0561A609	5.6 OHM 1/2 W(7.0) 5.00% TA52
R305	0RD1002F609	10K OHM 1/6 W 5% TA52
R306	0RD1002F609	10K OHM 1/6 W 5% TA52
R307	0RD3601F609	3.6K OHM 1/6 W 5.00% TA52
R308	0RN4702F409	47K OHM 1/6 W 1.00% TA52
R309	0RD2001F609	2K OHM 1/6 W 5% TA52
R31	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R310	0RN4702F409	47K OHM 1/6 W 1.00% TA52
R312	0RD4701F609	4.7K OHM 1/6 W 5% TA52
R313	0RN0471H609	4.7 OHM 1/2 W 5.00% TA52
R314	0RN0471H609	4.7 OHM 1/2 W 5.00% TA52
11017	31410 17 11 1000	5.111 1/2 17 5.55/3 1/102
R315	0RS2700K607	270 OHM 2 W 5.00% TA62

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LOCA. NO	PART NO	DESCRIPTION
R328	0RN3602F409	36K OHM 1/6 W 1.00% TA52
R33	0RD1000F609	100 OHM 1/6 W 5% TA52
R35	0RD1000F609	100 OHM 1/6 W 5% TA52
R37	0RD1000F609	100 OHM 1/6 W 5% TA52
R38	0RD1002F609	10K OHM 1/6 W 5% TA52
R403	0RD5600A609	560 OHM 1/2 W(7.0) 0.05 TA52
R404	0RD0332A609	33 OHM 1/2 W(7.0) 5.00% TA52
R405	0RS8200K607	820 OHM 2 W 5.00% TA62
R409	0RD1501A609	1.5K OHM 1/2 W(7.0) 5.00% TA52
R410	0RS2702K607	27K OHM 2 W 5.00% TA62
R412	0RD7501A609	7.5K OHM 1/2 W(7.0) 5.00% TA52
R42	0RD4701F609	4.7K OHM 1/6 W 5% TA52
R421	0RD3600F609	360 OHM 1/6 W 5.00% TA52
R422	0RD1002F609	10K OHM 1/6 W 5% TA52
R501	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R502	0RN6801F409	6.8K OHM 1/6 W 1.00% TA52
R503	0RN6801F409	6.8K OHM 1/6 W 1.00% TA52
R505	0RD1000F609	100 OHM 1/6 W 5% TA52
R506	0RD2202F609	22K OHM 1/6 W 5% TA52
R507	0RD3300F609	330 OHM 1/6 W 5.00% TA52
R508	0RD1201F609	1.2K OHM 1/6 W 5% TA52
R509	0RD3000F609	300 OHM 1/6 W 5.00% TA52
R510	0RD3000F609	300 OHM 1/6 W 5.00% TA52
R511	0RD3000F609	300 OHM 1/6 W 5.00% TA52
R512	0RD0332F609	33 OHM 1/6 W 5.00% TA52
R513	0RD0332F609	33 OHM 1/6 W 5.00% TA52
R514	0RD0332F609	33 OHM 1/6 W 5.00% TA52
R515	0RD1600F609	160 OHM 1/6 W 5.00% TA52
R516	0RD1600F609	160 OHM 1/6 W 5.00% TA52
R517	0RD1600F609	160 OHM 1/6 W 5.00% TA52
R518	0RD0222F609	22 OHM 1/6 W 5.00% TA52
R519	0RD2701F609	2.7K OHM 1/6 W 5% TA52
R519	0RD4701F609	4.7K OHM 1/6 W 5% TA52
R520	0RD1001F609	1K OHM 1/6 W 5% TA52
R521	0RD3002F609	30K OHM 1/6 W 5.00% TA52
R522	0RD0152F609	15 OHM 1/6 W 5.00% TA52
R522	0RD0302F609	30 OHM 1/6 W 5.00% TA52
R523	0RD1000F609	100 OHM 1/6 W 5% TA52
R524	0RD1000F609	100 OHM 1/6 W 5% TA52
R526	0RD1201F609	1.2K OHM 1/6 W 5% TA52
R526	0RD1201F609	1.2K OHM 1/6 W 5% TA52
R527	0RD2702F609	27K OHM 1/6 W 5.00% TA52
R532	0RD1000F609	100 OHM 1/6 W 5% TA52
R534	0RD1201F609	1.2K OHM 1/6 W 5% TA52
R535	0RD2200F609	220 OHM 1/6 W 5.00% TA52
R536	0RD1801F609	1.8K OHM 1/6 W 5.00% TA52
R539	0RD1002F609	10K OHM 1/6 W 5% TA52
R540	0RD4702F609	47K OHM 1/6 W 5% TA52
R542	0RD8200F609	820 OHM 1/6 W 5.00% TA52
R543	0RD9100F609	910 OHM 1/6 W 5.00% TA52
R545	0RD1002F609	10K OHM 1/6 W 5% TA52
R555	0RD6800F609	680 OHM 1/6 W 5% TA52

For Capacitor & Resistors, the charactors at 2nd and 3rd digit in the P/No. means as follows:

R904

0RD2200F609

220 OHM 1/6 W 5.00% TA52

CC, CX, CK, CN : Ceramic CQ : Polyestor CE : Electrolytic RD : Carbon Film RS : Metal Oxide Film RN : Metal Film RF : Fusible

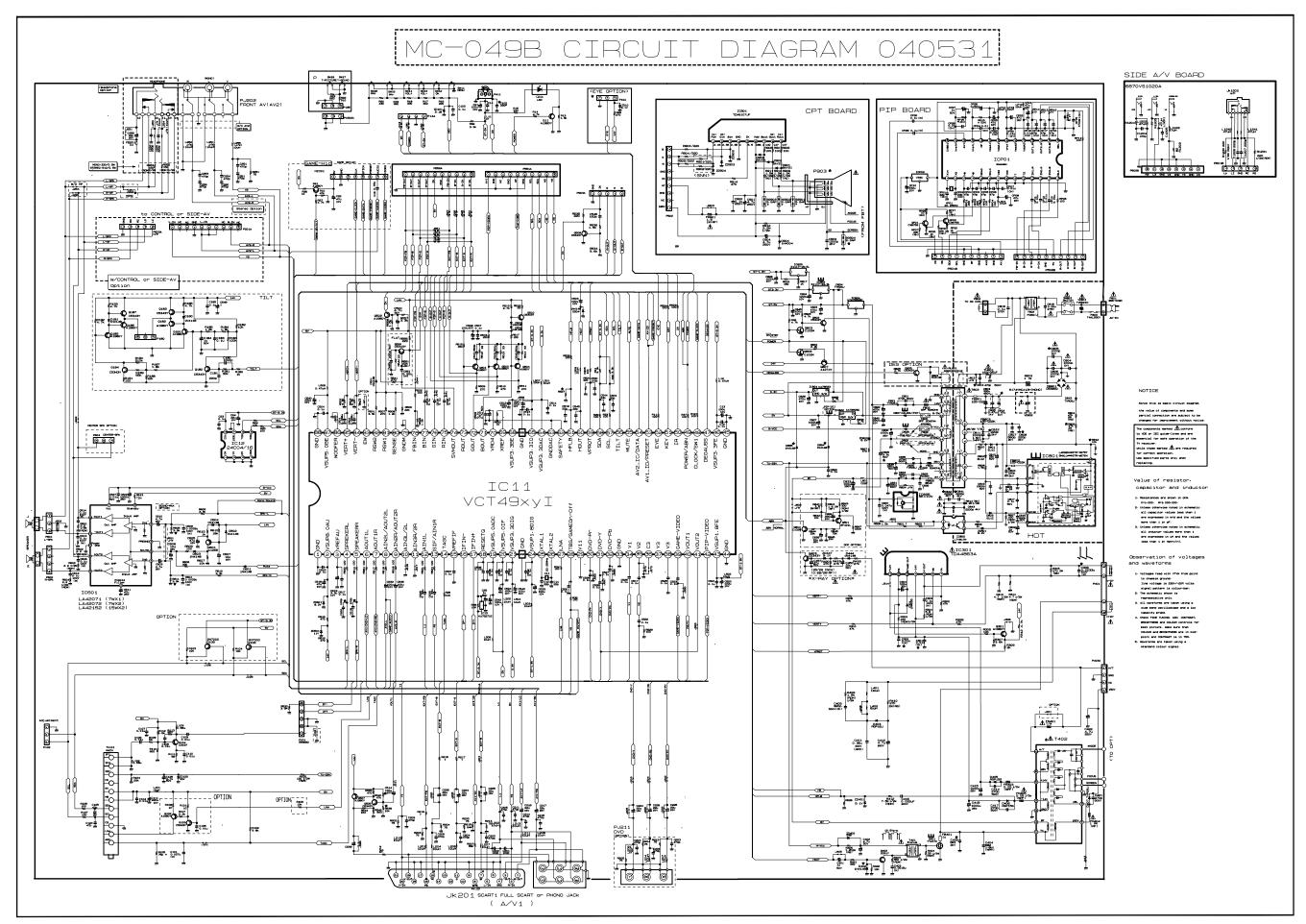
LOCA. NO PART NO **DESCRIPTION** R557 0RD3301F609 3.3K OHM 1/6 W 5.00% TA52 R558 0RD3001F609 3K OHM 1/6 W 5.00% TA52 R562 0RD0752F609 75 OHM 1/6 W 5 00% TA52 R563 0RD0752F609 75 OHM 1/6 W 5.00% TA52 R563 0RD0752F609 75 OHM 1/6 W 5.00% TA52 R601 0RD0221A609 2.2 OHM 1/2 W(7.0) 5.00% TA52 R602 0RD0221A609 2.2 OHM 1/2 W(7.0) 5.00% TA52 R603 0RD0221A609 2.2 OHM 1/2 W(7.0) 5.00% TA52 R604 0RD0221A609 2.2 OHM 1/2 W(7.0) 5.00% TA52 0RD1101F609 1.1K OHM 1/6 W 5.00% TA52 R605 0RD5601F609 R606 5.6K OHM 1/6 W 5% TA52 R607 0RD1002F609 10K OHM 1/6 W 5% TA52 R608 0RD1001F609 1K OHM 1/6 W 5% TA52 0RD1000F609 R609 100 OHM 1/6 W 5% TA52 R610 0RD1802F509 18K OHM 1/6 W 2.00% TA52 0RD1101F609 1.1K OHM 1/6 W 5.00% TA52 R611 R612 0RD5601F609 5.6K OHM 1/6 W 5% TA52 R613 0RD0221F609 2.2 OHM 1/6 W 5.00% TA52 R614 0RD1000F609 100 OHM 1/6 W 5% TA52 R615 0RD1001F609 1K OHM 1/6 W 5% TA52 0RD2700F609 R616 270 OHM 1/6 W 5% TA52 R617 0RD6801F609 6 8K OHM 1/6 W 5 00% TA52 R618 0RD6801F609 6.8K OHM 1/6 W 5.00% TA52 R619 0RD6801F609 6.8K OHM 1/6 W 5.00% TA52 0RD1000F609 R620 100 OHM 1/6 W 5% TA52 R621 0RD6801F609 6.8K OHM 1/6 W 5.00% TA52 R624 0RD6801F609 6.8K OHM 1/6 W 5.00% TA52 0RD6801F609 6.8K OHM 1/6 W 5.00% TA52 R664 0RKZVTA001K 0.47M OHM 1/2 W 5% TA52 R802 R803 180-822N RWR 7W 1.0 OHM J PD 47K OHM 2 W 5% TR R804 0RS4702K619 0RS4702K619 R805 47K OHM 2 W 5% TR R806 180-A01N 0.18 OHM 2 W 5% TA62 PRW R807 0RD2200A609 220 OHM 1/2 W(7.0) 5.00% TA52 R808 0RD1501F609 1.5K OHM 1/6 W 5% TA52 R809 0RD1001F609 1K OHM 1/6 W 5% TA52 R810 0RD0472F609 47 OHM 1/6 W 5% TA52 0RK8204H609 8.2M OHM 1/2 W 5.00% TA52 R814 R816 0RD1001F609 1K OHM 1/6 W 5% TA52 0RD0152F609 15 OHM 1/6 W 5.00% TA52 R817 R818 0RKZVTA001K 0.47M OHM 1/2 W 5% TA52 R823 0RD4701F609 4.7K OHM 1/6 W 5% TA52 0RD4701F609 R825 4 7K OHM 1/6 W 5% TA52 R827 0RD1001F609 1K OHM 1/6 W 5% TA52 0RD1501F609 1.5K OHM 1/6 W 5% TA52 R828 R831 0RD2201F609 2.2K OHM 1/6 W 5.00% TA52 R838 0RD4701F609 4.7K OHM 1/6 W 5% TA52 R838 0RD4701F609 4.7K OHM 1/6 W 5% TA52 R858 0RD4701F609 4.7K OHM 1/6 W 5% TA52 0RD4701F609 4.7K OHM 1/6 W 5% TA52 R858 R903 0RD2200F609 220 OHM 1/6 W 5.00% TA52

LOCA. NO	PART NO	DESCRIPTION
R905	0RD2200F609	220 OHM 1/6 W 5.00% TA52
R906	0RD1000F609	100 OHM 1/6 W 5% TA52
R907	0RD1000F609	100 OHM 1/6 W 5% TA52
R908	0RD1000F609	100 OHM 1/6 W 5% TA52
R909	0RCZVTA002D	1/2 W 1.5K,10%,PLIKOR(HIGH SURGE)
R910	0RCZVTA002D	1/2 W 1.5K,10%,PLIKOR(HIGH SURGE)
R911	0RCZVTA002D	1/2 W 1.5K,10%,PLIKOR(HIGH SURGE)
R912	0RD2204A609	2.2M OHM 1/2 W(7.0) 5.00% TA52
R914	0RD0102F609	10 OHM 1/6 W 5% TA52
		SWITCH
SW11	140-315A	TACT SKHV17910B LG C&D 12V
SW12	140-315A	TACT SKHV17910B LG C&D 12V
SW13	140-315A	TACT SKHV17910B LG C&D 12V
SW14	140-315A	TACT SKHV17910B LG C&D 12V
SW15	140-315A	TACT SKHV17910B LG C&D 12V
SW16	140-315A	TACT SKHV17910B LG C&D 12V
SW801	6600VM2002A	SDKEA3 ALPS IEC 250V 8A HORIZONTAL 480G
	FILT	ER & CRYSTAL
FB201	125-123A	FERRITE BFD3565R2F(TAPING)
FB801	125-022K	FERRITE AXIAL 62MM 1UH NY 3.5X6.0MM
FB802	125-022K	FERRITE AXIAL 62MM 1UH NY 3.5X6.0MM
FB803	125-022K	FERRITE AXIAL 62MM 1UH NY 3.5X6.0MM
FB825	125-022K	FERRITE AXIAL 62MM 1UH NY 3.5X6.0MM
T802	150-F06W	SQE2930 36MH 0.5PHY 105TURN .
X11	6212AA2994A	RESONATOR,CRYSTALHC-49U 20.25MHZ
Z101	6200QL3001Z	B39361-X6966-D100 EPCOS ST
		JACK
JK202	6612M00005A	UPJ-R1-027 UGCOM CH1
PJ201	6613V00006A	3P+EAR(PJ6062A)
PJ201	6613V00006B	2P+EAR(PJ6062B)
	A	CCESSORIES
A1	3828VA0492F	MANUAL,OWNERS112P/R/124D/E
A1	3828VA0492K	MANUAL,OWNERSSW 112P/R/124D/E TX
A1	3828VA0492L	MANUAL,OWNERSMK 112P/R/124D/E TX
A1	3828VA0492M	MANUAL,OWNERSPL 112P/R/124D/E TX
A1	3828VA0492N	MANUAL,OWNERSRO 112P/R/124D/E TX
A1	3828VA0492R	MANUAL,OWNERSRU/EN 112P/R/124D/E TX
A2	6710V00124E	REMOTE CONTROLLER, MC049B TXT
	MIS	CELLANEOUS
F801	0FS4001B53C	FUSE,SLOW BLOW 4000MA 250 V 5.2X20
P902	387-603E	CONNECTOR ASSEMBLY,9P 2.5MM 430MM
PA01	6712SCA226B	REMOTE CONTROLLER RECEIVER,KSM-913LG1T
SK901	6620VBC003A	SOCKET (CIRC),CPT PCS030A 8PIN 14/360
T402	6174V-6006M	FBT, BSC25-N1648 21 YY .
TH801	163-051F	THERMISTOR,PTC J503P84D140M290Q
TU101	6700VS0002H	TUNER, TAEW-G003D LGIT MULTI VS
VD801	164-003G	VARISTOR TVR621D144 THINKING 620V

VD801

164-003G

VARISTOR, TVR621D14A THINKING 620V



**SVC. SHEET: 3854VA0162A-S** 



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